AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): Separation membrane for separating water from organic solvent comprising

a porous substrate which is made of ceramic sintered body of which a main ingredient is alumina, and

a zeolite membrane which is formed over the surface of the porous substrate,

wherein the porous substrate comprises a base layer and a foundation layer which is formed on the base layer ~~and is formed of the zeolite membrane~~, wherein the zeolite membrane is formed on the foundation layer, and

wherein the separation membrane is characterized in that a mean pore diameter of the base layer is in the range of 4 - 12 μm, and a mean pore diameter of the foundation layer is in the range of 0.4 - 1.2 μm,

wherein thickness of the foundation layer is in the range of 10 - 200 μm,

wherein a nitrogen gas permeation rate through the porous substrate is in the range of 200-7000 $m^3/(m^2 \cdot hr \cdot atm)$,

wherein a flux Q which is a permeation rate of water is 5.0 $kg/(m^2 \cdot hr)$ or more, and a separation factor α of said separation membrane is 1000 or more,

wherein, in the separation of a first material and a second material, the separation factor α is expressed by the following equation (1),

$\alpha = (B_1/B_2)/(A_1/A_2)$ ... (1)

wherein A_1 represents the concentration % by weight of the first material before separation, A_2 represents the concentration % by weight of the second material, B_1 represents the concentration % by weight of the first material in a liquid or gas having permeated through the separation membrane, and B_2 represents the concentration % by weight of the second material.

2. (canceled).

3. (previously presented): Separation membrane according to Claim 1, wherein the nitrogen gas permeation rate is in the range of 400-7000 $m^3/(m^2 \cdot hr \cdot atm)$.

4. (canceled).

5. (previously presented): Separation membrane according to Claim 1, wherein thickness of the base layer is in the range of 1 - 3 mm.

6. (canceled).

7. (previously presented): Separation membrane according to Claim 1, wherein aspect ratio of particles of which the foundation layer is comprised is not less than 1.05.

8. (original) Separation membrane according to Claim 7, wherein the aspect ratio of particles of which the foundation layer is comprised is not less than 1.2.

9. (previously presented): Separation membrane according to Claim 1, wherein porosity of the porous substrate is in the range of 20 - 50%.

10. (original) Separation membrane according to Claim 9, wherein the porosity of the porous substrate is in the range of 35 - 40 %.

11. (previously presented): Separation membrane according to Claim 1, wherein the porous substrate has a maximum pore diameter of not more than 9 μm, the maximum pore diameter being determined by the bubble point method using water.

12. (previously presented): Separation membrane according to Claim 1, wherein the porous substrate has a maximum pore diameter of not more than 7 μm, the maximum pore diameter being determined by the bubble point method using water.

13. (previously presented): Separation membrane according to Claim 1, wherein a total content of Ca and K included in the porous substrate is not more than 0.8 mol%.

14. (previously presented): Separation membrane according to Claim 1, wherein the total content of Ca and K is not more than 0.5 mol%.

15. (previously presented): Separation membrane according to Claim 1,

wherein the zeolite membrane is formed by dipping the foundation layer into the slurry including the zeolite seed crystals, attaching the zeolite seed crystals to the foundation layer, dipping the foundation layer into a reaction solution including raw materials for the hydrothermal reaction, proceeding the synthetic reaction of the zeolite, and

wherein a relationship between the mean diameter dsm of the zeolite seed crystals and the mean pore diameter dtm of the foundation layer satisfy a requirement of $1/3 \leq dtm/dsn \leq 10$.

16. (canceled).